

# Carocet<sup>®</sup>

Tablet

## Description

Carocet is a chewable tablet which contains a combination of three antioxidant vitamins;  $\beta$  carotene, vitamin C and vitamin E.

## Indications

Antioxidant vitamins are used in a wide range of conditions where free radical damage is playing a role. Antioxidant vitamin combination is used in the prevention of coronary heart diseases, certain types of cancer, aging as well as free radical damage caused by excessive exercise, illness, certain medications, air pollution, smoke, radiation and pesticides. The main role of the antioxidant vitamins is as follows :

$\beta$  carotene prevents free radical formation by quenching singlet oxygen, a highly reactive form of oxygen. Vitamin C is another free radical scavenger which deactivates free radicals. It works specially in the plasma, lung fluid, aqueous humour and interstitial fluid. It can increase white blood cell activity; play important roles in the biochemistry of antibodies, prostaglandin E<sub>1</sub>, B and T lymphocytes, and interferon. Vitamin E also scavenges free radicals in the blood along with  $\beta$  carotene and vitamin C. Moreover, vitamin E is essential to protect against some of the ill effects of smog and smoke. In relation to other nutrients vitamin E protects vitamin A from being destroyed in the body.

## Dosage and Administration

Dosage varies according to individual's need. The usual recommended dose is two tablets daily or as advised by the physician. The dose can be increased up to four tablets daily.

## Contraindication

Carocet is contraindicated in patients with hypersensitivity to any of its components.

## Precautions

There are some evidences that  $\beta$  carotene may cause harm to heavy smokers and alcoholics. Therefore, caution should be exercised in these cases.

Vitamin C should be given with caution to patients with hyperoxaluria. Vitamin E should be used with caution in patients taking anticoagulant drugs, because vitamin E may enhance the anticoagulant activity of these drugs.

### **Drug Interactions**

Cholestyramine, Colestipol, Neomycin cause decreased absorption of  $\beta$  carotene. Circulating vitamin C levels have been shown to be reduced during prolonged administration of oral contraceptives containing Oestrogen, Tetracycline and Aspirin. The decrease in vitamin C level may be due to drug induced impaired absorption or increased utilization of the vitamin for drug metabolism. Vitamin E may enhance the anticoagulant activity of anticoagulant drugs. High doses of vitamin E can impair intestinal absorption of vitamins A and K.

### **Side Effects**

$\beta$  carotene is comparatively safe even at high and prolonged exposure. Individuals who routinely ingest large amounts of carotenoids can develop hypercarotenosis, which is characterised by a yellowish colouration of the skin and a very high concentration of carotenoids in the plasma. This benign condition, although resembling jaundice, gradually disappears upon correcting the excessive intake of carotenoids. Vitamin C is generally a safe drug for human use in normal doses. Larger doses may lead to gastrointestinal tract upset and renal stone formation. Vitamin E is considered safe even in large doses. Doses over 800 mg may cause diarrhoea, abdominal pain or cramps, fatigue and reduced resistance to bacterial infection and transiently raised blood pressure.

### **Use in Special Population**

*Pregnancy and lactation* :  $\beta$  carotene, vitamin C and vitamin E have no teratogenic effects in humans. However, like any other drugs caution should be taken in prescribing to pregnant women.

### **Commercial Pack**

Carocet<sup>®</sup> Tablet : Bottle containing 20 tablets. Each tablet contains  $\beta$  carotene (pharma grade) 6 mg, Ascorbic acid USP and Sodium Ascorbate USP equivalent to Ascorbic acid (Vitamin C) 200 mg and Vitamin E preparation USP equivalent to *dl*- $\alpha$ -Tocopheryl Acetate (Vitamin E) 50 mg.